

OCT 11 2006

PATENT  
W&B Ref. No. : INF 2233-US  
Atty. Dkt. No. INFNWB0058**REMARKS**

This is intended as a full and complete response to the Final Office Action dated August 11, 2006, having a shortened statutory period for response set to expire on November 11, 2006. Applicant submits this response to place the application in condition for allowance or in better form for appeal. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1 and 4-21 are pending in the application. Claims 1 and 4-21 remain pending following entry of this response. Claims 1, 4, 7, 15 and 18 have been amended. Claims 2, 3, 13 and 21 have been cancelled. Applicant submits that the amendments and new claims do not introduce new matter.

**Claim Rejections - 35 U.S.C. § 103**

Claims 1, 3-5, 7-10, & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Namekawa* (US Pat no. US 6115301 A) and further in view of *Arase* (US 5808945 A.)

Claims 6, 11, 12, & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Namekawa* (US Pat no. US 6115301 A) in view of *Arase* (US 5808945 A,) and further in view of *Bemis* (US Pat no. 4692894 A.)

Claims 14, 16, & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Namekawa/Arase* in view of *Sakata* (US PG-Pub no. 20010045581 A1.)

Claims 18-21 are rejected on the same grounds as claims 1-17. Applicant respectfully traverses these rejections.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there

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must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143.

The present rejection fails to establish at least the third criteria, as the prior art does not teach or suggest all the claim limitations. For example, the prior art does not teach replacing a defective memory area with a redundant word line if the defective areas exceed a first maximum number and with a redundant bit line if the defective areas exceed a second maximum number.

In rejecting claim 1, the Examiner asserts that *Arase* teaches the recited element of replacing a defective memory area with a redundant word line if the defective areas exceed a first maximum number and with a redundant bit line if the defective areas exceed a second maximum number, stating on p. 3 of the Office Action (emphasis added):

*Arase* teaches: "the address of a defective sub word line or a defective sub bit line is stored in the defect address memory means. Only when a defective sub word line or a defective sub bit line having the same address as one of the defect addresses is selected, the defective main word line or the defective main bit line are replaced by a redundant main word line or redundant main bit line by the selective main word line replacing means or the selective main bit line replacing means" (column 2, lines 55-64). Here clearly the defective word line or the defective bit line is replaced when there is a match in the address. Since, addresses are represented numerically they can be classified as numbers, and the word line address can be interpreted as the first number which is maximum to a smaller address and the same can be interpreted for the address representation of the bit line.

Applicant agrees with the Examiner's assertions that *Arase* teaches that defective areas are "replaced when there is a match in the address", that addresses can be "represented numerically", and that "the word line address can be interpreted as the first number which is maximum to a smaller address". However, Applicant respectfully submits that the Examiner's logical construct, while valid on its own merits, does not apply to the present claim 1. In the recited element of selecting a replacement redundant group "if the defective memory areas that are addressable by a common

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word line group exceeds a first maximum number", the word "exceeds" refers to a number of "defective memory areas", not to an address. Thus, claim 1 discloses a condition that is met when the number of defective memory areas exceeds a maximum number. In contrast, the Examiner's argument relates to a numeric address that "exceeds" a maximum number. Clearly, claim 1 refers to a quantitative comparison, whereas the Examiner's interpretation of *Arase* does not. Applicant respectfully submits that *Arase* does not teach or suggest all the limitations of the present claim 1.

In order to clarify aspects of the invention, Applicant has amended independent claims 1, 7, 15 and 18, and the analysis above also applies to these claims as amended. Accordingly, Applicant submits these claims, as well as their dependents, are allowable, and respectfully requests withdrawal of this rejection.

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**Conclusion**

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

If the Examiner believes any issues remain that prevent this application from going to issue, the Examiner is strongly encouraged to contact the undersigned attorney to discuss strategies for moving prosecution forward toward allowance.

Respectfully submitted,



Randol W. Read  
Registration No. 43,876  
PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)